

In the Claims: (strikethrough parts deleted and underlined parts added)

Please delete Claims 4, 5, 6 and 9 without prejudice.

1. (Currently Amended) An optical stitch regulator system, comprising:
a sewing machine; and
at least one optical sensor attached to said sewing machine for measuring a movement of a piece of fabric relative to a needle of said sewing machine, wherein said movement is comprised of a direction and a velocity of the piece of fabric and, wherein said optical sensor is in communication with said sewing machine regarding said movement.
2. (Original) The optical stitch regulator system of Claim 1, wherein said optical sensor is positioned within a sewing platform of said sewing machine.
3. (Original) The optical stitch regulator system of Claim 2, wherein said optical sensor is directed substantially upwardly.
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Original) The optical stitch regulator system of Claim 1, wherein said optical sensor is positioned near said needle of said sewing machine.
8. (Original) The optical stitch regulator system of Claim 1, wherein said optical sensor is positioned in front of said needle of said sewing machine.
9. (Canceled)

10. (Original) The optical stitch regulator system of Claim 1, wherein said sewing machine controls the sewing operation based upon said movement for producing consistent stitches.

11. (Original) The optical stitch regulator system of Claim 1, including a control unit in communication between said optical sensor and said sewing machine, wherein said control unit is comprised of a motion interpretation module that transmits movement information to said sewing machine.

12. (Original) The optical stitch regulator system of Claim 1, wherein said optical sensor is directed downwardly.

13. (Original) The optical stitch regulator system of Claim 12, including a support member attached to said sewing machine and supporting said optical sensor.

14. (Original) The optical stitch regulator system of Claim 13, including an attachment member that attaches said support member to said upper portion of said sewing machine.

15. (Original) The optical stitch regulator system of Claim 1, wherein said optical sensor is comprised of a light source and a light receiver, wherein said light receiver detects light reflected by a piece of fabric.

16. (Original) The optical stitch regulator system of Claim 15, wherein said light source is a light emitting diode.

17. (Original) The optical stitch regulator system of Claim 1, wherein said light sensor is positioned within a sewing platform of said sewing machine and wherein said light sensor extends above an upper surface of said sewing platform.

18. (Currently Amended) A process of operating an optical stitch regulator for a sewing machine, said process comprising:

sensing a movement of fabric relative to a needle of a sewing machine with at least one optical sensor, wherein said movement is comprised of a direction and a velocity of said movement;

generating a movement data representing said movement; and

adjusting a motor speed within said sewing machine based upon said movement data.

19. (Currently Amended) An optical stitch regulator system, comprising:

a sewing machine carriage; and

at least one optical sensor attached to said sewing machine carriage for measuring a movement of a piece of fabric relative to a needle of a sewing machine, wherein said movement is comprised of a direction and a velocity of the piece of fabric and, wherein said optical sensor is capable of communicating with a sewing machine regarding said movement.